AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Withdrawn) A compound which interacts with the β-amyloid peptide in such a way the N-terminal loop of the peptide (amino acid residues 1-15) is blocked or destabilized, thereby inhibiting the binding of one or more metal ions to at least one histidine residue within the N-terminal loop.

2. (Withdrawn) A compound according to claim 1 which inhibits binding Cu^{2+}, Zn^{2+} and Fe^{3+} ions, but not Mg^{2+} or Ca^{2+} ions.

3. (Withdrawn) A compound according to claim 1 which has a conformation and polarity such that it binds to at least one histidine residue in the N-terminal loop, selected from the group consisting of His6, His13 and His14.

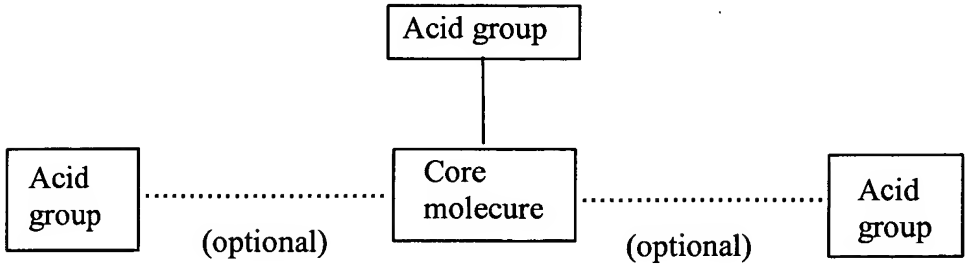
4. (Withdrawn) A compound according to claim 3, which binds to at least two histidine residues in the N-terminal loop.

5. (Withdrawn) A compound according to claim 3, which binds to at least two histidine residues in the N-terminal loop.

6. (Withdrawn) A compound according to claim 1, which also binds to at least one additional amino acid in the N-terminal loop, selected from the group consisting of Asp7, Tyr10, and Glu11.

7. (Withdrawn) A compound according to claim 1, which has acidic groups which interact with one or more of the His residues in the N-terminal loop.

8. (Withdrawn) A compound according to claim 7, represented as follows:



wherein the core molecule has a conformation and polarity such that the acid group(s) interact with one or more His6, His13 andHis14.

9. (Withdrawn) A compound according to claim 8, in which the acid group is selected from the group consisting of CO_2H, PO_3H_2,SO_3H,OSO_3H_2, and OPO_3H_2.

10. (Withdrawn) A compound according to claim 9, which is a molecule with one to three carboxylic acid groups, the length of the molecule being such that it can be received within the N-erminal loop, and such that at least one carboxyl group is in proximity to at least one of the histidine residues.

11. (Withdrawn) A compound according to claim 1, which is an organic molecule, a peptide or a metal complex.

12. (Withdrawn) A compound according to claim 9, which is not a metal complex.

13. (Withdrawn) A compound according to claim 9, which has overall hydrophobic character.

14. (Withdrawn) A compound according to claim 10, which is able to penetrate the blood-brain barrier.

15. (Withdrawn) A compound according to claim 1, which comprises, or is conjugated to, a targeting moiety, forming an inhibitor-targeting moiety complex.

16. (Withdrawn) A compound according to claim 15, in which the targeting moiety is selected from the group consisting of polypeptides, nucleic acids, carbohydrates, lipids, β-amyloid ligands, antibodies, and dyes.

17. (Withdrawn) A compound according to claim 15, in which the targeting moiety has a hydrophobic region which interacts with the tail of the β-amyloid peptide.

18. (Withdrawn) A compound according to claim 17, in which the targeting moiety comprises a fatty acid molecule.

19. (Withdrawn) A compound according to claim 15, in which the targeting moiety targets the compound to a site defined by residues 15-21 of the β–amyloid peptide.

20. (Withdrawn) A compound according to claim 17, in which the targeting moiety is a peptide which comprises a sequence which corresponds to that of residues 15-21 of the β-amyloid peptide.

21. (Withdrawn) A compound according to claim 15, in which the inhibitor-targeting moiety complex is able to penetrate the blood-brain barrier.

22. (Withdrawn) A method of selecting or designing a compound which inhibits the binding of metal ions to the N-terminal loop of the β-amyloid peptide, which method comprises the steps of

(i) selecting or designing a compound which has a conformation and polarity such that it binds to at least one amino acid in the N-terminal loop selected from the group consisting of His6, His 13 and His14; and

(ii) testing the compound for the ability to inhibit binding of metal ions to the N-terminal loop of the β-amyloid peptide.

23. (Withdrawn) A method according to claim 22, in which the compound binds to at least two histidine residues in the N-terminal loop.

24. (Withdrawn) A method according to claim 23, in which the compound binds to at least three histidine residues in the N-terminal loop.

25. (Withdrawn) A method according to claim 22, in which the compound also binds to at least one additional amino acid in the N-terminal loop, selected from the group consisting of Asp7, Tyr1O, and Glull.

26. (Withdrawn) A method according to claim 22, in which the compound inhibits binding of Cu^{2+}, Zn^{2+} and Fe^{3+} ions, but not Mg^{2+} or Ca^{2+} ions.

27. (Withdrawn) A method according to claim 22, in which the compound has overall hydrophobic character.

28. (Withdrawn) A method according to claim 27, in which the compound is able to penetrate the blood-brain barrier.

29. (Withdrawn) A compound which inhibits the binding of metal ions to the N-terminal loop of the β–amyloid peptide, wherein the compound is obtained by a method according to claim 22.

30. (Withdrawn) A composition comprising a compound according to claim 1, together with a pharmaceutically-acceptable carrier.

31. (Original) A method of inhibiting the binding of one or more metal ions to the β-amyloid peptide, which method comprises the step of exposing the peptide to a compound which blocks or destabilizes the N-terminal loop of the peptide, thereby inhibiting the binding of one or more metal ions to at least one histidine residue within the N-terminal loop.

32. (Original) A method according to claim 31, in which the compound has a conformation and polarity such that it binds to at least one histidine residue in the N-terminal loop of the β-amyloid peptide, selected from the group consisting of His6, His13 and His14.

33. (Original) A method according to claim 32, in which the compound binds to at least two histidine residues in the N-terminal loop.

34. (Original) A method according to claim 33, in which the compound binds to at least three histidine residues in the N-terminal lop.

35. (Previously Presented) A method according to claim 31, in which the compound also binds to at least one additional amino acid in the N-terminal loop, selected from the group consisting of Asp7, Tyr10, and Glu11.

36. (Previously Presented) A method according to claim 31, in which the compound inhibits binding of Cu^{2+}, Zn^{2+} and Fe^{3+} ions, but not Mg^{2+} or Ca^{2+} ions.

37. (Withdrawn) A method according to claim 31, in which the compound is a complex of Mn, Fe, Co, Ni, Cu, Zn, Ru, Pd, Ag, Cd, Pt, Au, Rh or Hg, with the proviso that the compound is not haemin or haematin.

38. (Previously Presented) A method according to claim 31, in which the compound comprises, or is conjugated to, a targeting moiety.

39. (Previously Presented) A method according to claim 38, in which the targeting moiety targets the compound to a site defined by residues 15-21 on the β–amyloid peptide.

40. (Previously Presented) A method according to claim 31, in which the inhibition of binding of one or more metal ions to the β–amyloid peptide occurs *in vivo*.

41. (Currently amended) A method of ~~prevention,~~ treatment ~~or alleviation~~ of Alzheimer's disease in a subject, which method comprises the step of administering a compound ~~according to claim 1~~ to [[a]]said subject ~~in need of such treatment~~ wherein said compound interacts with the β-amyloid peptide in such a way that the N-terminal loop of the peptide is blocked or destabilized, thereby inhibiting the binding of one or more metal ions to at least one histidine residue within the N-terminal loop.

42. (Canceled)

43. (Withdrawn) A composition comprising a compound according to claim 29, together with a pharmaceutically acceptable carrier.

44. (Currently amended) ~~A method of prevention, treatment or alleviation of Alzheimer's disease in a subject, which method comprises the step of administering a pharmaceutical composition according to claim 30 to a subject in need of such treatment~~ The method of claim 41, wherein said compound is administered together with a pharmaceutically acceptable carrier.

45. (New) The method of claim 31, wherein the peptide is exposed to said compound in the presence of at least one metal ion capable of binding the peptide.

46. (New) The method of claim 31, wherein said compound is a metal complex.